

**WHAT IS CLAIMED IS:**

1. A method for detecting malicious scripts using a static analysis, comprising the step of:  
checking whether a series of methods constructing a malicious code pattern exist and  
5 whether parameters and return values associated between the methods match each other,  
wherein the checking step comprises the steps of:  
classifying, by modeling a malicious behavior in such a manner that it includes a  
combination of unit behaviors each of which is composed of sub-unit behaviors or one or more  
method calls, each unit behavior and method call sentence into a matching rule for defining  
10 sentence types to be detected in script codes and a relation rule for defining a relation between  
patterns matched so that the malicious behavior can be searched by analyzing a relation between  
rule variables used in the sentences satisfying the matching rule;  
generating instances of the matching rule by searching for code patterns matched with the  
matching rule from a relevant script code to be detected, extracting parameters of functions used in  
15 the searched code patterns, and storing the extracted parameters in the rule variables; and  
generating instances of the relation rule by searching for instances satisfying the relation  
rule from a set of the generated instances of the matching rule.
2. The method according to claim 1, wherein the matching rule is composed of rule identifiers  
and sentence patterns constructing malicious behavior and having the same grammar as a language  
20 of the scripts to be detected, and wherein the relation rule comprises conditional expressions (Cond)  
in which conditions satisfying the relevant rule are described, and action expressions (Action) in  
which contents to be executed are described when the conditions in the conditional expressions are  
satisfied.
- 25 3. The method according to claim 2, wherein the relation rule further includes preconditions  
(Precond) in which conditions that should be satisfied prior to the conditions in the conditional  
expressions are described, and  
the action expressions describe contents that will be executed when both the conditional  
expressions and the preconditions are satisfied.

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